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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,056	12/10/2001	Kenneth John Roberts	50325-0625	7026

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EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/015,056	ROBERTS, KENNETH JOHN	
	Examiner	Art Unit	
	VAN H NGUYEN	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the application filed on December 10, 2001.
2. Claims 1-32 are presented for examination. Claims 1, 8, 15, 21, and 27 are independent claims.

Specification

3. The abstract of the disclosure is objected to because it **exceeds the limit of 150 words**.
Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Al-Ghosein et al.** (U.S. 6,473,791 B1) in view of **Hunt** (U.S. 6,230,312 B1).
6. **As to claim 1:**
 - a. Al-Ghosein teaches the invention substantially as claimed including a method for applying one or more policy constraints (*security policies; see the abstract*) in an

application program (*applications; see the abstract*), the method comprising the computer-implemented step of: redirecting a request to invoke a routine contained in the application program to a policy broker (*system components 60₁–60_n ‘e.g., applications’ make calls to an intelligent trust manager 62 in order to have trust decisions made therefor in accordance with a predetermined policy. To obtain a decision, the intelligent trust manager 62 in turn communicates with a policy manager 64; col.4, lines 12-18*) wherein the processing of the request to invoke the routine by the policy broker causes the one or more policy constraints to be applied to invocation of the routine (*a policy manager 64 to invoke an appropriate one of the policy objects 66₁– 66_n. The corresponding policy object ‘e.g. 66₃’ makes an advisory decision, i.e., yes, no or insufficient information to make a determination, and returns the decision to the system component (e.g., 60₁) via the intelligent trust manager 62; col.4, lines 17-23*).

- b. Al-Ghosein does not specifically teach “without modifying program code.”
- c. Hunt teaches without modifying program code (*without modifying application sources; col.37, lines 22-29*).
- d. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Al-Ghosein with Hunt because Hunt’s teachings would allowed a programmer to insert or remove constraints on a specific application without changing the application sources. Therefore, reducing cost and improving performance and efficiency of Al-Ghosein’s system.

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7. **As to claim 2:**

Al-Ghosein teaches the redirecting of the request to the policy broker is performed by invoking a routine managed by the policy broker *(to obtain a decision, the intelligent trust manager 62 in turn communicates with a policy manager 64 to invoke an appropriate one of the policy objects 66₁- 66_n; col.4, lines 16-19).*

8. **As to claim 3:**

Al-Ghosein teaches substituting original code contained in the routine with replacement code that invokes a routine managed by the policy broker *(to replace a policy...invoke the other policy instead of the existing policy; col.4, lines 38-42).*

9. **As to claim 4:**

Al-Ghosein teaches the replacement code includes only code that invokes a routine managed by the policy broker *(policy objects are COM objects, they include executable code for making decisions; col.4, lines 46-47).*

10. **As to claim 5:**

- a. Hunt teaches the original code is original source code and the replacement code is replacement source code *(source code; col.51, lines 31-36 and col.55, lines 26-27).*
- b. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Al-Ghosein with Hunt because Hunt's teachings would have provided the capability for automatically detecting location constraints on the placement of units of an application program.

11. **As to claim 6:**

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- a. Hunt teaches the original code is original object code and the replacement code is replacement object code (*object; col.51, lines 31-36 and col.55, lines 24-25*).
- b. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Al-Ghosein with Hunt because Hunt's teachings would have provided the capability for automatically detecting location constraints on the placement of units of an application program.

12. **As to claim 7:**

Al-Ghosein teaches the one or more policy constraints include one or more security constraints (*if a decision to access a file for read and write...a security identifier is needed; col.6, lines 5-11*).

13. **As to claim 8:**

It is directed to a computer-readable medium for implementing the method of claim 1 above, and is similarly rejected under the same rationale. Additionally, Al-Ghosein further teaches one or more processors (*see fig. 2*).

14. **As to claims 9-14:**

They are directed to a computer-readable medium for implementing the method of claims 2-7 above, and are similarly rejected under the same rationale.

15. **As to claim 15:**

- a. Al-Ghosein teaches the invention substantially as claimed including a method for implementing policy constraints (*implementing security policies; see the abstract*) in an application program (*applications; see the abstract*), the method comprising the computer-implemented steps of: identifying a routine in the application

program for which one or more policy constraints are to be applied, wherein the routine is invoked by program code contained in the application program
(applications create a request describing an action that needs to be checked against an appropriate security policy. The request is given to a trust system that determines which policy object applies to the request; see the abstract); and substituting replacement code for original code contained in the identified routine (to replace a policy with another policy...invoke the other policy instead of the existing policy; col. 4, lines 38-42), wherein execution of the replacement code by one or more processors causes the one or more policy constraints to be applied (allows policies to be shared by numerous system components; col. 4, lines 43-46).

- b. Al-Ghosein does not specifically teach “without modifying program code.”
- c. Hunt teaches without modifying program code *(without modifying application sources; col.37, lines 22-29).*
- d. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Al-Ghosein with Hunt because Hunt’s teachings would allowed a programmer to insert or remove constraints on a specific application without modifying the application sources.

16. As to claim 16:

Al-Ghosein teaches the substitution of the replacement code for the original code is performed without changing any calls to the routine that are contained in the application program *(col.4, lines 35-42).*

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17. **As to claim 17:**

Al-Ghosein teaches the replacement code contains the original code (*col.4, lines 63-66*).

18. **As to claims 18-20:**

They include the same limitations as in claims 5-7 above, and are similarly rejected under the same rationale.

19. **As to claim 21:**

It is directed to a computer-readable medium for implementing the method of claim 15 above, and is similarly rejected under the same rationale.

20. **As to claims 22 and 23:**

They include the same limitations as in claims 16 and 17 above, and are similarly rejected under the same rationale.

21. **As to claims 24-26:**

They include the same limitations as in claims 5-7 above, and are similarly rejected under the same rationale.

22. **As to claim 27:**

It is directed to an apparatus for performing the method of claim 15 above, and is similarly rejected under the same rationale. Additionally, Al-Ghosein further teaches a memory (a system memory 22; *col.2, lines 45-46*).

23. **As to claims 28 and 29:**

They include the same limitations as in claims 16 and 17 above, and are similarly rejected under the same rationale.

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24. **As to claims 30-32:**

They include the same limitations as in claims 5-7 above, and are similarly rejected under the same rationale.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- (i) Britton et al. (U.S. 6681380) teaches "Aggregating constraints and/or preferences using an inference engine and enhanced scripting language."
- (ii) Choi et al. (U.S. 6487716) teaches "Methods and apparatus for optimizing programs in the presence of exceptions."
- (iii) Archer (U.S. 6473748) teaches "System for implementing rules."
- (iv) Griffin et al. (U.S. 5513350) teaches "Update constraints in transactions which may abort."
- (v) Alhusaini et al. "A framework for mapping with resource co-allocation in heterogeneous computing systems" 2000 IEEE, pp.1-14.
- (vi) Liu et al. "An agent based architecture for supporting application level security" 2000 IEEE, pp.1-12.

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26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.
27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756.
28. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for patents

P O Box 1450

Alexandria, VA 22313-1450



Van H. Nguyen